Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A peptide consisting of the sequence ~~R_1-X_1-V-R-X_4-R_2~~ R_1-X_1-X_2-X_3-X_4-R_2 or ~~partial or~~ full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N, Q, and D; X_2 is V; X_3 is R; and X_4 is L; ~~the X_1-V-R-X_4 sequence is selected from the group consisting of N-V-R-L (SEQ ID NO:57), N-V-R-F (SEQ ID NO: 51), Q-V-R-L (SEQ ID NO: 80), Q-V-R-F (SEQ ID NO:53), and D-V-R-L (SEQ ID NO:102);~~ R_1 is a hydrogen or from 1 to 6 amino acids, an acyl or an aryl group; and R_2 is from 1 to 3 amino acids, a hydroxide or an amide, provided that the peptide binds α3β1 integrin ~~and does not comprise the sequence FQGVLQNVRFVF (SEQ ID NO:6)~~.

2. (Currently amended) The peptide of claim 1, wherein the peptide contains the ~~X_1-V-R-X_4~~ sequence X_1-X_2-X_3-X_4 and is up to 12 amino acids in length.

3. (Previously presented) The peptide of claim 1 wherein R_1 is a peptide consisting of the sequence selected from the group consisting of FQGVLQ (SEQ ID NO:13), FAGVLQ (SEQ ID NO:14), FQGVAQ (SEQ ID NO:15), FQGVLA (SEQ ID NO:16), and FQGVLN (SEQ ID NO:17).

4. (Previously presented) A peptide that binds α3β1 integrin, wherein said peptide consists of a sequence selected from the group consisting of FQGVLQQVRFVF (SEQ ID NO:20), FQGVLQSVRFVF (SEQ ID NO:21), acQGVLQNVRF (SEQ ID NO:22), FQGVLNNVRFVF (SEQ ID NO:24), AQGVLQNVRFVF (SEQ ID NO:25), FAGVLQNVRFVF (SEQ ID NO:26), FQGVAQNVRFVF (SEQ ID NO:27),

FQGVLQNVRFVA (SEQ ID NO:28), FQGVLANVRFVF (SEQ ID NO:29), FQGVLQNVRFV (SEQ ID NO:30), QGVLQNVRFVF (SEQ ID NO:31), and FQGVLQNVRF (SEQ ID NO:32).

5. (Currently amended) ~~The~~ A peptide ~~of claim 1~~ consisting of the sequence R_1-X_1-X_2-X_3-X_4-R_2 or full retro-inverso sequences thereof, wherein X_1 is selected from the group consisting of N and Q; X_2 is V; X_3 is R; and X_4 is F; R_1 is a hydrogen or from 1 to 6 amino acids, an acyl or an aryl group; and R_2 is from 1 to 3 amino acids, a hydroxide or an amide, provided that the peptide binds $\alpha 3\beta 1$ integrin, and wherein the ~~X_1-V-R-X_4~~ X_1-X_2-X_3-X_4 portion of the sequence is optionally selected from the group consisting of NVRF (SEQ ID NO:51) and QVRF (SEQ ID NO:53).

6-7. (Cancel)

8. (Currently amended) A retro-inverso synthetic peptide consisting of the amino acid sequence, from C-terminal (left) to N-terminal (right): ri-R'_1-X'_1-X'_2-X'_3-X'_4-R'_2, wherein ri denotes a retro-inverso peptide sequence and all amino acids are D amino acids; wherein X_1 is selected from the group consisting of N, Q, and D; X_2 is V; X_3 is R; and X_4 is L; ~~the X'_1-V-R-X'_4 sequence is selected from the group consisting of N-V-R-L (SEQ ID NO:57), N-V-R-F (SEQ ID NO: 51), Q-V-R-L (SEQ ID NO: 80), Q-V-R-F (SEQ ID NO:53), and D-V-R-L (SEQ ID NO:102);~~ R'_1 is a hydrogen or from 1 to 6 amino acids, a hydroxide or an amide; and R'_2 is from 1 to 3 amino acids, an acyl or an aryl group.

9. (Currently amended) The peptide of claim 8, wherein the peptide contains the ~~X'_1-V-R-X'_4~~ sequence X'_1-X'_2-X'_3-X'_4 and is up to 12 amino acids in length.

10. (Previously presented) A peptide consisting of the sequence FQGVLQNVRFVF (SEQ ID NO:6) wherein every amino acid in said sequence is a D-amino acid.

10. (Previously presented) A peptide consisting of the sequence FQGVLQNVRFVF (SEQ ID NO:6) wherein every amino acid in said sequence is a D-amino acid.

11-12. (Canceled)

13. (Previously presented) A composition comprising a peptide according to claim 1 and a pharmaceutically acceptable carrier.

14. (Previously presented) A composition comprising a peptide according to claim 1 in a sterile aqueous solution.

15-19. (Canceled)

20. (Withdrawn) An *in vitro* method of inhibiting adhesion of a cell expressing $\alpha 3\beta 1$ integrin to an extracellular matrix comprising contacting said cell with a peptide according to claim 1.

21. (Withdrawn) The method of claim 20 wherein the extracellular matrix comprises TSP1 or laminins.

22. (Cancel)

23. (Withdrawn) The method of claim 20 wherein said cell comprises an epithelial or an endothelial cell.

24. (Withdrawn) The method of claim 20 wherein said cell is a tumor cell.

25. (Withdrawn) The method of claim 20 wherein said cell is a breast carcinoma cell or a small cell lung carcinoma.

26. (Withdrawn) An *in vitro* method of inhibiting $\alpha 3\beta 1$ integrin-mediated cell motility, comprising contacting a cell with a peptide according to claim 1.

27. (Canceled)

28. (Withdrawn) The method of claim 26 wherein the cell is an epithelial cell, an endothelial cell or a malignant cell.

29. (Withdrawn) An *in vitro* method of inhibiting proliferation of endothelial cells, comprising contacting said cells with a peptide according to claim 1.

30. (Withdrawn) An *in vitro* method of inhibiting proliferation of small cell lung carcinoma cells, comprising contacting said cells with a peptide according to claim 2.

31-45. (Canceled)

46. (Currently amended) A peptide consisting of the sequence ~~R_1-D-V-R-F-R_2;~~ R_1-X_1-X_2-X_3-X_4-R_2 or ~~partial or~~ full retro-inverso sequences thereof, wherein ~~D-V-R-F is SEQ ID NO:54;~~ X_1 is D; X_2 is V; X_3 is R; and X_4 is F; R_1 is a hydrogen or from 1 to 6 amino acids, an acyl or an aryl group; and R_2 is 2 or 3 amino acids, a hydroxide or an amide, provided that the peptide binds $\alpha 3\beta 1$ integrin.

47. (Previously presented) The peptide according to claim 46 consisting of the sequence FQGVLQDVRFVF (SEQ ID NO:19).

48. (Previously presented) The peptide of claim 46, wherein the peptide contains the sequence DVRF (SEQ ID NO:54) and is up to 12 amino acids in length.

49. (Previously presented) The peptide of claim 46 wherein R_1 is a peptide consisting of the sequence selected from the group consisting of FQGVLQ (SEQ ID NO:13), FAGVLQ (SEQ ID NO:14), FQGVAQ (SEQ ID NO:15), FQGVLA (SEQ ID NO:16), and FQGVLN (SEQ ID NO:17).

50. (Previously presented) The peptide of claim 46 that contains at least one D-amino acid.

51. (Previously presented) A composition comprising a peptide according to claim 46 and a pharmaceutically acceptable carrier.

52. (Previously presented) A composition comprising a peptide according to claim 46 in a sterile aqueous solution.

53. (Previously presented) A retro-inverso synthetic peptide consisting of the amino acid sequence, from C-terminal (left) to N-terminal (right): ri- R'_1-D-V-R-F-R'_2, wherein ri denotes a retro-inverso peptide sequence and all amino acids are D amino acids and D-V-R-F is SEQ ID NO:54; R'_1 is a hydrogen or from 1 to 6 amino acids, a hydroxide or an amide; and R'_2 is 2 or 3 amino acids, a hydroxide or an amide, provided that the peptide binds $\alpha 3\beta 1$ integrin.

54. (Previously presented) The peptide of claim 46, wherein the peptide contains the sequence DVRF (SEQ ID NO:54) and is up to 12 amino acids in length.